JURAGON Pro USER MANUAL PX-20RD-USA (Pro Model, Ver 2.2.09k)

1. Safety Precautions

Electrical hazards

⚠CAUTION Read all details below before use!

Do not use damaged power cord or damaged power outlet. Risk of electric shock or fire.

Do not pull on the cord when and keep your hands away from plug connectors. Risk of electric shock or fire.

Never pull the plug out of the outlet during the incubation period. Incubation operation will stop until power is restored.

Do not twist, pinch or crush the electric cord. Risk of electric shock or fire.

Do not insert multiple connecting plugs in outlet. Risk of fire or electrical overload.

Setting Cautions

⚠CAUTION Read all details below before use!

Do not operate in a dusty or dirty environment. Risk of damage or fire within the incubator.

Do not operate in location with direct sunlight. Risk of fire or improper incubation results.

Do not operate in moist or humid environment. Risk of fire or electric shock.

Do not operate in excessively cold or hot conditions, smoke, etc. Risk of improper incubation results.

Do not use other parts except those provided. Risk of damage or improper incubation results.

Do not cover the ventilation opening. Inner temperature can rise and cause improper incubation results

Install away from heat sources. Risk of damage to the incubator and improper incubation results.

Be sure the incubator is operated on a stable surface away from edge. Risk of damage to the incubator and eggs.

Do not turn incubator upside-down. Water will pour out of the incubator and view window can fall off.

Do not install where anyone can easily move. Risk of knocking the incubator over or risk of fire or electric shock.

Do not disassemble or modify the incubator in any manner. Risk if electric shock or fire.

Please be sure that small objects do not get into incubator. Risk of electric shock or fire.

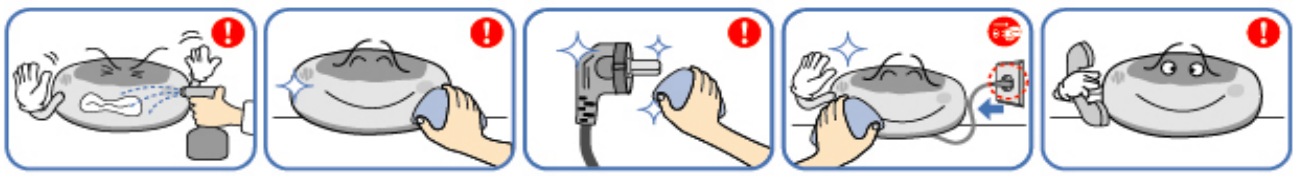
If you hear strange sounds or see smoke, immediately unplug it and contact your service center. Risk of electric shock or fire.

Clean the incubator thoroughly before storing. (see cleaning section) Unplug power before cleaning!!

If the incubator requires repair unplug power cord and contact the service center located on the last page.

Cleaning Cautions

⚠CAUTION



Do not spray cleanser directly on the incubator surface.

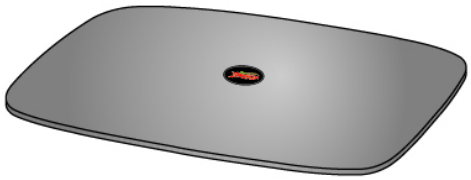
Clean the incubator with a soft cotton cloth and warm water mixed with 5% bleach. Do not exceed 5% bleach.

After cleaning, brush away dust on the plug with a dry cloth.

Do not use chemicals like wax, benzene, alcohol, paint thinner, Aromatic cleansers or oil lubricants, etc.

For a very dirty unit that requires cleaning of inner parts please contact the service center located on the last page.

2. Part Identification Chart



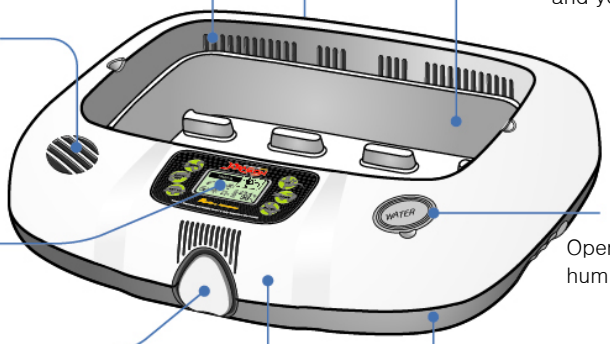
Top View Window
For a clear view of inside. (Double-pane construction to reduce humidity condensation.)

Vents for low-volume air circulation.
Internal circulation of warm air.

Power Receptacle
(rear of incubator)
Power cord plugs in here.

Egg Hatching Tray
Tray for HatchRite substrate or vermiculite (incubation sand) and your reptile eggs.

Air inlet vent
For inlet of air from outside



Digital Control Center
See instructions for all control operation functions.

Rubber Water Cap
Open to fill water for humidity control.

Locking Buttons
(Total of three, two more on rear side.)

Main Upper Body-1

Lower Body-2

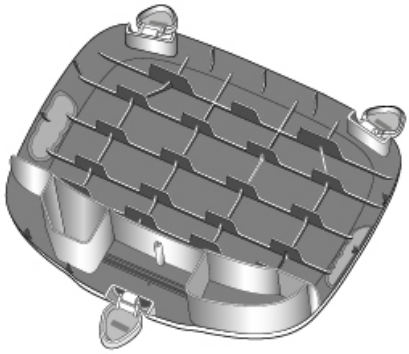
3. Basic Components

Main Upper Body-1

Water Cap

Clear View Window

Lower Body-2



Egg Tray

Power Cord
(120 Volt for USA)

User Manual

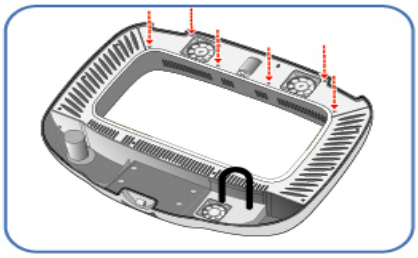
4. How to Assemble

Insert the power cord in the power receptacle on the rear of the main upper body.

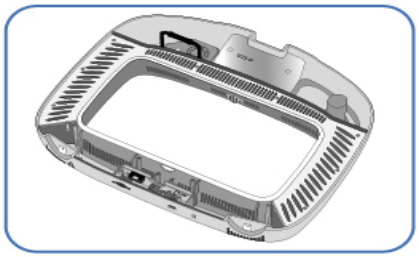
Lock the three locking buttons. One on the front and two on the rear of the incubator.

5. How to Replace Fuse

▶ If the incubator fails to power up and you are sure that power is present perform the following. FIRST UNPLUG THE POWER CORD FROM THE WALL OUTLET !!!
Remove the internal plastic cover as shown.
A small phillips screwdriver is required.

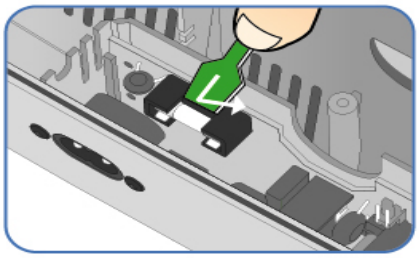


▶ Once the cover is opened you will find the electronics board as shown.
Remove faulty fuse with screwdriver.

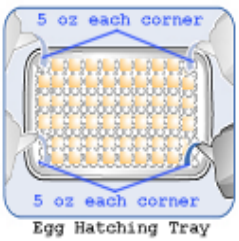


▶ Replace with new fuse per image at right and specifications below. DO NOT USE ANY OTHER SIZE OR RATING FUSE!!!

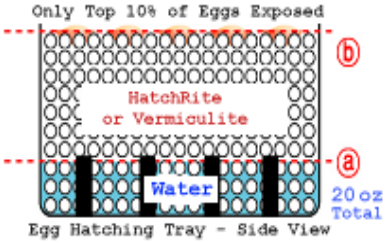
(250V, 2.0Amp, Ø5*20mm)



6. Before Operating Your New Reptile Incubator (Please Read Carefully)



[Figure – 1]



[Figure – 2]

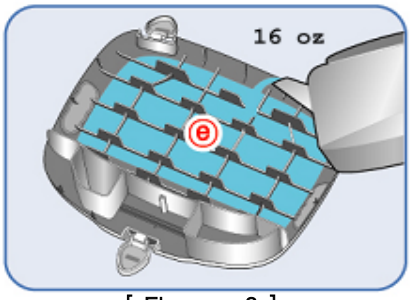
Room temperature should always be about 4F° lower than the incubator operating temperature and room humidity should always be at least 4% lower than the incubator operating humidity. Place eggs in tray last.
The incubator does not cool the air.

The incubation room should be between 62°F~77°F and the room humidity be between 35%~70%.
(Note: The room temperatures provided are for incubator operation at least 4°F higher than room temperature.)

▶ For low humidity operation (60% ~ 80%): Fill the HatchRite or vermiculite (incubation sand purchased separately) into the small incubating tray as shown above in [Fig.– 2]ⓑ. No extra water is required in the bottom of the egg tray [Fig.– 2]. Be sure your HatchRite or Vermiculite is pre–wet to a consistency of slight moisture – BUT NOT TOO WET. Use a total of about 3 ounces of water for a 2–pound bag of HatchRite. Vermiculite may be very dry so use your judgment on how much water to add. The consistency should not allow for the substrate to stick together when pressed between your fingers.

▶ For high humidity operation (80% ~ 95%): Fill the HatchRite or vermiculite (incubation sand purchased separately) into the small incubating tray as shown above in [Fig.– 2]ⓑ. Now fill the small incubating tray with 5 ounces of water in each corner of the egg tray [Fig.– 1] which equates to 20 ounces (oz) total of water as shown in [Fig.– 2]ⓐ. Also fill the lower, inside bottom tray with 16 ounces of water [Fig.– 3]e. Do not get water on eggs when adding water!

1. Before installing the main top body–1 and starting incubation fill water (preferably distilled water – although not required) into the water tanks ⓒ and ⓓ of the main lower body–2 as shown in [Fig.–4]ⓒⓓ shown to the right. Use room temperature water (not warm or hot water).

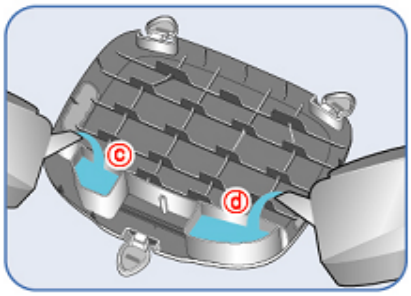


[Figure – 3]

⚠ Always remove water from the incubator before moving it.
Otherwise the incubator electronics can be destroyed and void the warranty.

2. Be sure the humidification heater part [Fig.–6] of the main body–1 is fitted down into the water tank of main body–2 when assembling.

Tip Do not apply force or bend the humidification heater part on the upper part of the body as shown in [Fig.–6]. It may cause failure and would void the warranty.



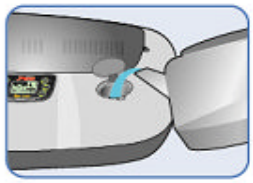
[Figure – 4]

3. After placing your hatching substrate as described above place the egg tray inside the incubator and operate it for 3 hours. Then check for proper temperature and humidity and place your hatching eggs into the tray as shown and described. Be sure to carefully bury your hatching eggs only leaving about 10% of the egg showing. Remember to mark the top of the eggs before moving them from where they were laid and move them carefully, being sure you do not shake them.

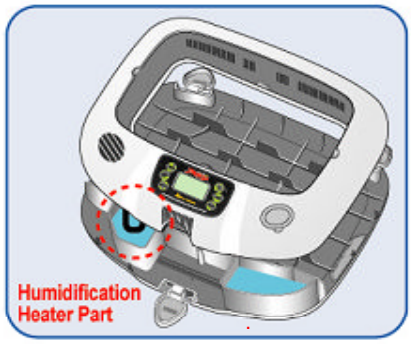
4. Bury the lower 90% of the eggs into the HatchRite or Vermiculite as shown in [Fig.–2] above. Check the conditions of the eggs once a week. Remove unfertilized eggs, or eggs covered with mold.

5. Check the water level for humidification everyday and fill it up as shown in Fig – 5. Stop filling water when the Styrofoam ball floats near the top. (Suggested use of distilled water to prevent mineral buildup on heating unit, although not required)

⚠ Do not reuse hatching substrate.

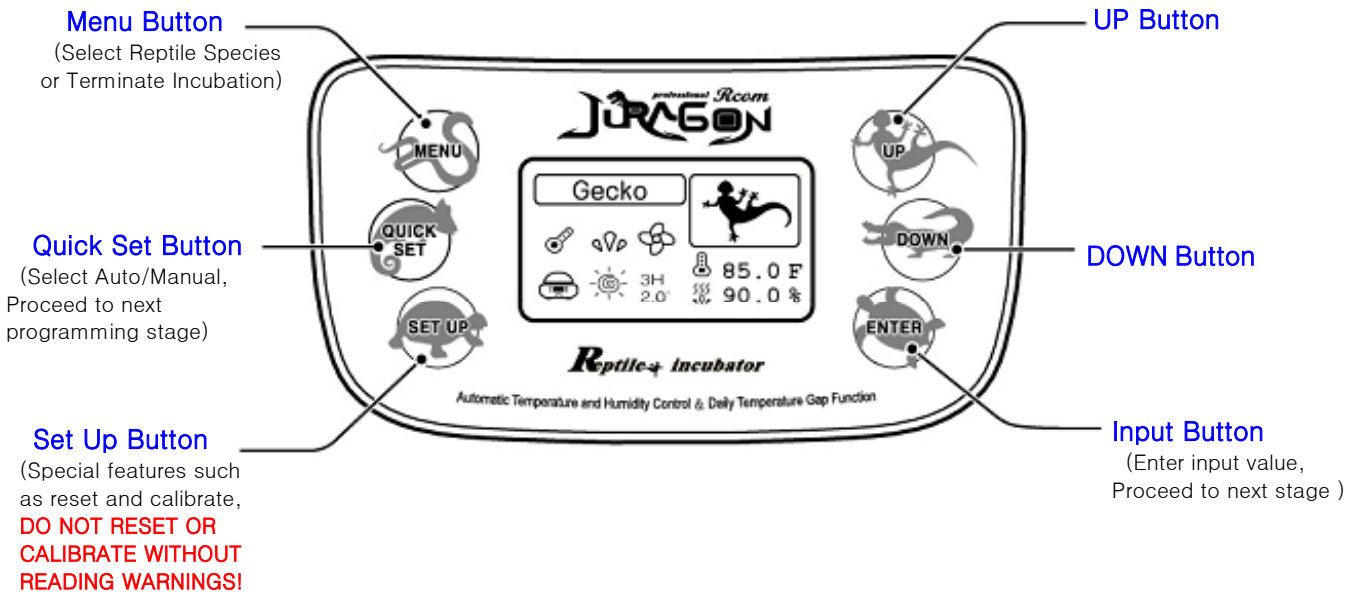


[Figure – 5]



[Figure – 6]

7. Control Panel Operation



8. Display Explanation

	ICON	NAME AND FUNCTION
1	Gecko	Species of Reptile Selected
2		Heater Off Display Heater On Display
3		Humidification Off Display Humidification On Display
4		Window Closed Window Opened
5		Daily Temperature Gap Off Daily Temperature Gap On

	ICON	NAME AND FUNCTION
6	Others, Chameleon, Snake, Alligator, Gecko, Turtle, Tortoise	Reptile Icon Selection Display
7		Low Circulation Fan Active Display
8	3Hr 0.0℃	Daily Temp Gap Hours Setting Value Display
9	26.1℃	Current Temperature Display Temperature Abnormal Display
10	40 % OFF	Current Humidity Display Humidification function OFF

9. SET UP (Menu Functions)

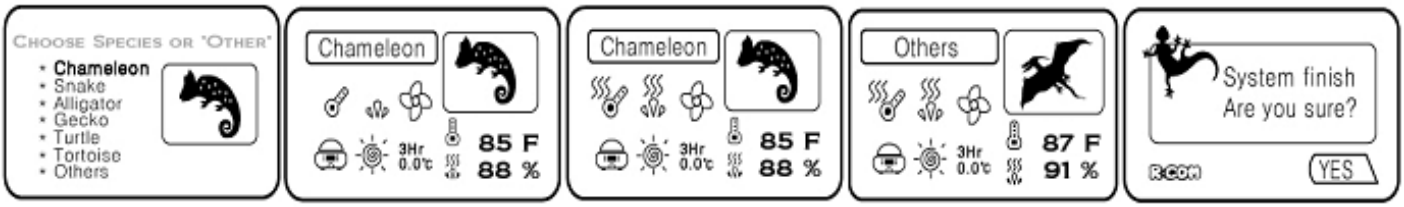
All Reset	ALL RESET	DO NOT RESET. The Factory uses an expensive calibrator to perform very accurate calibration.
Info		Basic information of Incubator (Software Version Indication)
T.CAL Temperature Calibration		Do Not Calibrate unless you have an expensive, high accuracy thermometer !!
H.CAL Humidity Calibration		Do Not Calibrate unless you have an expensive, high accuracy humidity meter !!
Unit		Select between Centigrade (C) and Fahrenheit (F)
Light		LCD Backlight management setting Always On : Always Backlight On Event On : 20 Sec. ON with Key input Always Off : Always Backlight Off Default Value : Always On
Sound		ON/OFF Setting for Melody, low water & other alarms Default Value : ON (Button Sound still remains.)

10. Easy Function Main Menu Operation

REFER TO "HOW TO START INCUBATION" FOR MORE INFORMATION.

Automatic Mode Incubation	QUICK SET ▶ Select the Species of Reptile ▶ ENTER 2 Sec.
Other (Manual) Mode Incubation	MENU ▶ UP / DOWN Select the Species of Reptile ENTER ▶ Temp. Setting Humid. Setting Daily Temp. Gap Setting ▶ ENTER
How to change Settings During Incubation. (QUICK SET)	QUICK SET Once: Temp. Setting Twice: Humidity Setting Three times: Daily Temp. Gap setting ▶ UP / DOWN ▶ ENTER
Incubation Termination	Screen on Incubation MENU ▶ System finish Are you sure? UP / DOWN Select YES ▶ ENTER
Incubator Initialization (DO NOT RESET, Service Center Only)	SET UP BACK ▶ UP / DOWN "All Reset" ▶ ENTER ▶ ENTER
℃ ↔ ℉ How to change	SET UP BACK ▶ UP / DOWN ℃ ℉ ▶ ENTER ▶ UP / DOWN ℃↔℉ ▶ ENTER
How to turn off Humidification Function (If you want to operate with low humidity)	Screen on Incubation QUICK SET 2 times ▶ DOWN UNDER 40% ▶ " OFF " ▶ ENTER

11. How to start incubation (Auto or Manual Modes)



MANUAL screen

HOME screen before starting incubation

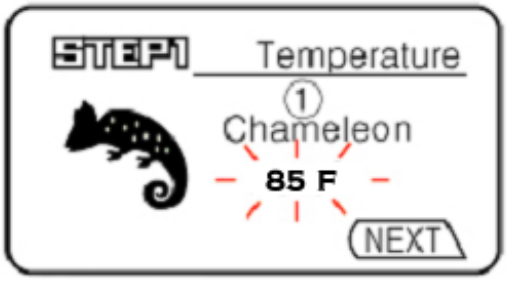
Screen showing incubation for Chameleons is in progress

Screen showing incubation of "Other" Reptiles is in progress

Screen showing termination of incubation

- Auto incubation
  - QUICK SET button (Selection of Reptiles)
  - ENTER button (Auto incubation starts after two seconds)
- OTHER (MANUAL) incubation
  - MENU button
    - Temperature setting
      - ① Temperature Setting– Incubation Temp. Setting
    - Humidity setting
      - ② Humidity Setting– Incubation Humidity Setting
    - Daily Temp. Gap Setting
      - ③ Temp. Gap – Time Setting
      - ④ Daily Temp. Gap – Temperature Setting
    - Incubation starts.
  - UP/DOWN button (Selection of Reptiles)
  - ENTER button
- Incubation completion (terminate incubation)
  - MENU button
  - UP/DOWN button ("yes" selection)
  - ENTER button (incubation termination)

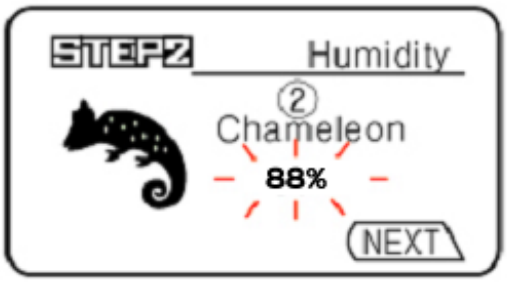
▶ Incubation environments such as temperature, humidity, etc. are preset in automatic mode. User only needs to select the type of reptile.
User can make changes to incubation environment at any time if necessary.



[Temperature setting screen]

STEP1 Temperature setting example

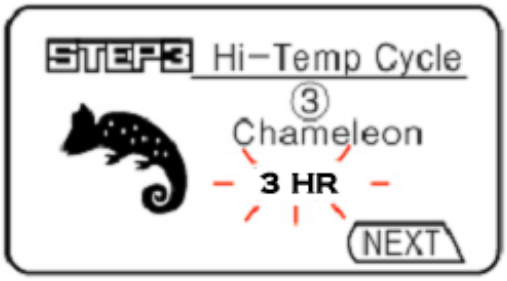
The reptile incubation temp ① on the menu screen is memorized in the microchips. User can optionally change the incubation temperatures.
(Initial setting: depends on type of reptile selected)



[Humidity setting screen]

STEP2 Humidity setting example

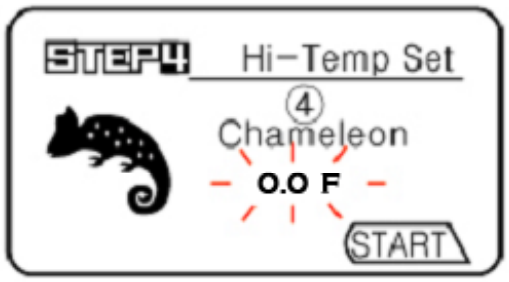
The reptile incubation Humidity ② on the menu screen is memorized in the microchips. User can optionally change the incubation Humidity.
(Initial setting: depends on type of reptile selected)



[Hi-Temp Cycle Gap- Time Setting Screen]

STEP3 Daily Temp. Gap- Time Setting example

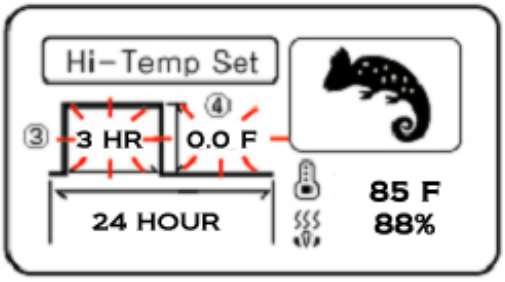
Daily Temperature Gap time function ③ simulates the warmest period during the day that would normally be found in nature for the species. User can input the amount of hours to set the optimum conditions.
(Initial setting: ③ three hours.)



[Hi-Temp Cycle Gap- Hour Setting Screen]

STEP4 Daily Temp. Gap- Temperature Setting example

This sets the warmer temperature amount in degrees ④ by the amount of hours ③ in the above step.
In nature it is often found that the temperature is about 1 degree F to 2 degrees F higher than the incubation temperature for the remainder of the day. Desert reptiles often experience an even higher daily temperature rise. (Initial setting: depends on type of reptile selected ④.)



[QUICK SET Screen]

▶ QUICK SET button:

This button is used to quickly change the incubation environment conditions. (IE: temperature, humidity, daytime temperature gap). If QUICK SET button is pressed the temperature window blinks in the incubation progressing screen.
When changing temperature, set the temperature with up/down button and then press enter button to move to next step.
It will be then stored and after all steps are reviewed it will return to normal operation.

If you do not want to change any certain step of the incubation environment, press the QUICK SET button to move to the next step.

▶ You change to next mode by pressing the QUICK SET button 1 to 4 times.
You can also use it when you want to double check incubation settings while incubation is in progress.

▶ Auto Incubation:

Optimum incubation conditions for the species of reptiles are memorized in the microchip.
With this function, you can easily set up this incubator.
Select the species of reptile after pressing the MENU screen with the QUICK SET button,
and then press ENTER button for about 2 seconds to start incubation.

▶ Other (Manual) Incubation:

Other (Manual) incubation is for incubating “Other” species of reptiles that are not included in the incubator preset menu. You can set the incubation condition according to your needs. Press MENU button and select "Others" with UP/DOWN button, and then press the ENTER button. Set your desired temperature, humidity, and daily temperature gap to meet your requirements and press the ENTER button after each input.

▶ What is Daily Temperature Gap Function?

This function allows for incubation conditions very similar as found in nature.
It creates the highest temperature time period that would be produced by the sun as in nature.
This function helps increase hatching rates with optimum incubation conditions.

12. How to turn the Humidification Function OFF (not normally used)

▶ You can turn off the humidification function when you don't require higher humidities.

▶ Press "QUICK SET" button twice, and press DOWN button until OFF indicated at humidity setting.
Then, press the ENTER button. (OFF will show when the humidity is under 40%.)

13. How to Terminate (End) Incubation (after your eggs hatch)

▶ Press the MENU button until it says "System finish Are you sure ?"

▶ Select YES with the UP / DOWN button, and then press the ENTER button.

Do not turn your incubator off and then leave it closed without cleaning & drying it out. Otherwise humidity will build up on the internal circuits since the heaters are not functioning. This can damage your incubator which would not covered under warranty. To prevent this problem, disassemble main body 1 and 2 and dry completely before storing. (You can dry the incubator by operating the incubator for at least 2 hours after removing all water.)

14. Incubator Reset (Warning !!!)

DO NOT PEFORM THIS FUNCTION OR YOUR HUMIDITY AND TEMPERATURE CALIBRATION WILL BE RESET TO FACTORY SETTINGS THAT ARE NOT VERY ACCURATE.
Your incubator requires recalibration if you reset it. Recalibration is not covered under warranty but can be made by any competent person with a very accurate thermometer and accurate humidity meter.
The unit we use at the factory is a $1500 temperature/humidity meter that is very accurate.

(ALL RESET) For returning to the factory setting

▶ If you want to return to the initial setting values by resetting the incubator, follow this sequence.
1) Select All Reset with SET UP mode button
2) Press Enter
3) Press OK

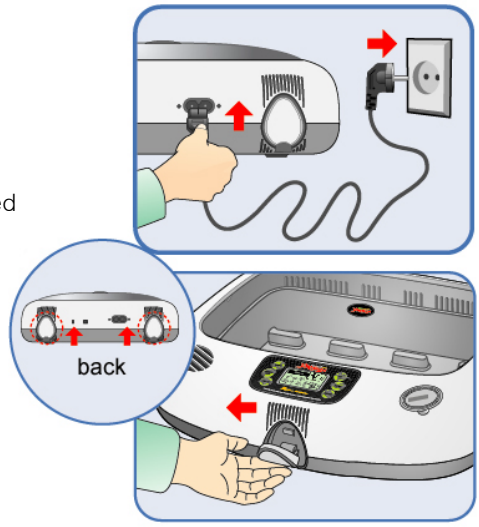
15. How to Clean after Hatching

- Unplug the electric cord from the rear incubator receptacle and remove the electric cord plug from the wall outlet.

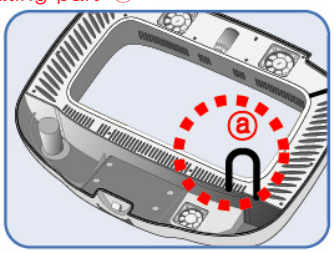
- Unlock the three locking buttons at the front and rear of incubator and disassemble the incubator.

- Disassemble the incubator. The bottom part shall be thoroughly cleaned with water and dried. The upper parts shall be naturally dried in order to remove moisture inside the incubator. Allow to dry for 24 hours. Assemble the parts in the reverse order of disassembly.

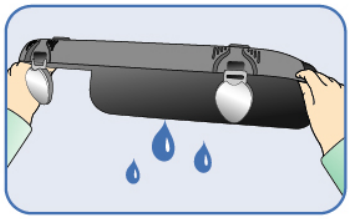
- There may be mineral buildup on the humidification heating part ⓐ. It doesn't affect operation and you just need to clean it with a very soft brush when cleaning the unit. Do not scrape it with a knife, razor blade or any sharp object as you may damage the rubber membrane.



⚠ Do not use sharp objects on the humidification heating part ⓐ or it can be damaged and not covered under warranty.



⚠ Do not clean the product with solvents such as benzene, paint thinner, etc.



16. How to Calibrate Temperature and Humidity

⚠ Remember that calibration is not a normal function that you. It is also not used to set the operating temperature & humidity conditions for incubation.

DO NOT PEFORM THESE CALIBRATION FUNCTIONS OR YOUR HUMIDITY AND TEMPERATURE CALIBRATION WILL BE CHANGED AND YOUR UNIT WILL NOT WORK PROPERLY.
Only perform this is you are a qualified repair center or know what you are doing.
Recalibration is not covered under warranty but can be made by any competent person with a very accurate thermometer and accurate humidity meter.
The unit we use at the factory is a $1500 temperature/humidity meter that is very accurate.

⚠ The calibration function is used to properly match the temperature and humidity inside the incubator to correct values measured inside the incubator using a very accurate thermometer and hygrometer. Do not calibrate the incubator as normal thermometers and hygrometers are not more reliable than the factory incubator calibration.

Tip **How to Calibrate**: Place your very accurate thermometer and hygrometer in the top of the egg tray filled with your egg hatching substrate. Operate it for two hours before starting the calibration.

⚠ Be sure to check ALL CAUTIONS mentioned earlier in this instruction book before you ever calibrate the temperature or humidity.

▶ **Temperature** is calibrated 3 times over a 90 minute period, once every 30 minutes. After the temperature is calibrated and matches your thermometer you can then calibrate the humidity. After operating the incubator, press the SET UP button and select T.CAL on incubation screen. Then, adjust the temperature with the UP/ DOWN button to match what your thermometer reads and press the ENTER button to save the new setting.

▶ **Humidity** is then calibrated 4 times over the next 2 hour period, once every 30 minutes. After operating the incubator, press the SET UP button and select H.CAL on incubation screen. Then, adjust the humidity with the UP/ DOWN button to match what your humidity meter reads and press the ENTER button to save the new setting. After the humidity is calibrated and matches your humidity meter you are finished.

17. Juragon Pro Incubator Specifications

Power	AC 100V~120V, 50/60Hz, Special Order in AC 220V~240V, 50/60Hz
Temp. Limits	68°F~102.0°F
Temp. Accuracy	± 0.3°F
Room Temperature	Ideal: 66°F~73°F 62°F~78°F for 66°F~82°F Operation 79°F~88°F for 83°F~ 92°F Operation
Humidity Limits	40% ~ 95% (Can be changed according to programming settings)
Humidity Accuracy	± 3%
Power Consumption	Max 48W, Min Approx 15W
Capacity	Depends on size of reptile eggs.
Net Weight	14 pounds
Size	(W) 19.7" × (L) 16.1" × (H) 6.3"
Fuse Standard	2.0Amp (250V , Ø5×20mm)

Visit our web site www.ReptileIncubator.com for more information on all Juragon Reptile Incubators. Warranty or non-warranty service is provided by sending an email to us by visiting www.ReptileIncubator.com

Juragon Digital Reptile Incubators are designed for easy and convenient use. Incubator design, how to use, etc. can be changed without advance notice.

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